

# NATIONAL REPORT

## -PHILIPPINES-

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### I. Information on Wild Populations

#### a. Species of seahorses

Information on the actual number of seahorse species found in Philippine waters is still not known. Although surveys that have been conducted till now have not been that extensive, seven species of seahorses have already been identified. These numbers may still increase if studies and surveys on seahorses are carried out nationwide. The seven species of seahorses observed to occur in Philippine waters are as follows:

- 1) *Hippocampus barbouri*
- 2) *H. comes*
- 3) *H. kelloggi*
- 4) *H. kuda*
- 5) *H. spinosissimus*
- 6) *H. trimaculatus* and
- 7) *H. bargibanti*

Another species of seahorse is reportedly present in the waters of Negros Occidental but this is yet to be confirmed.

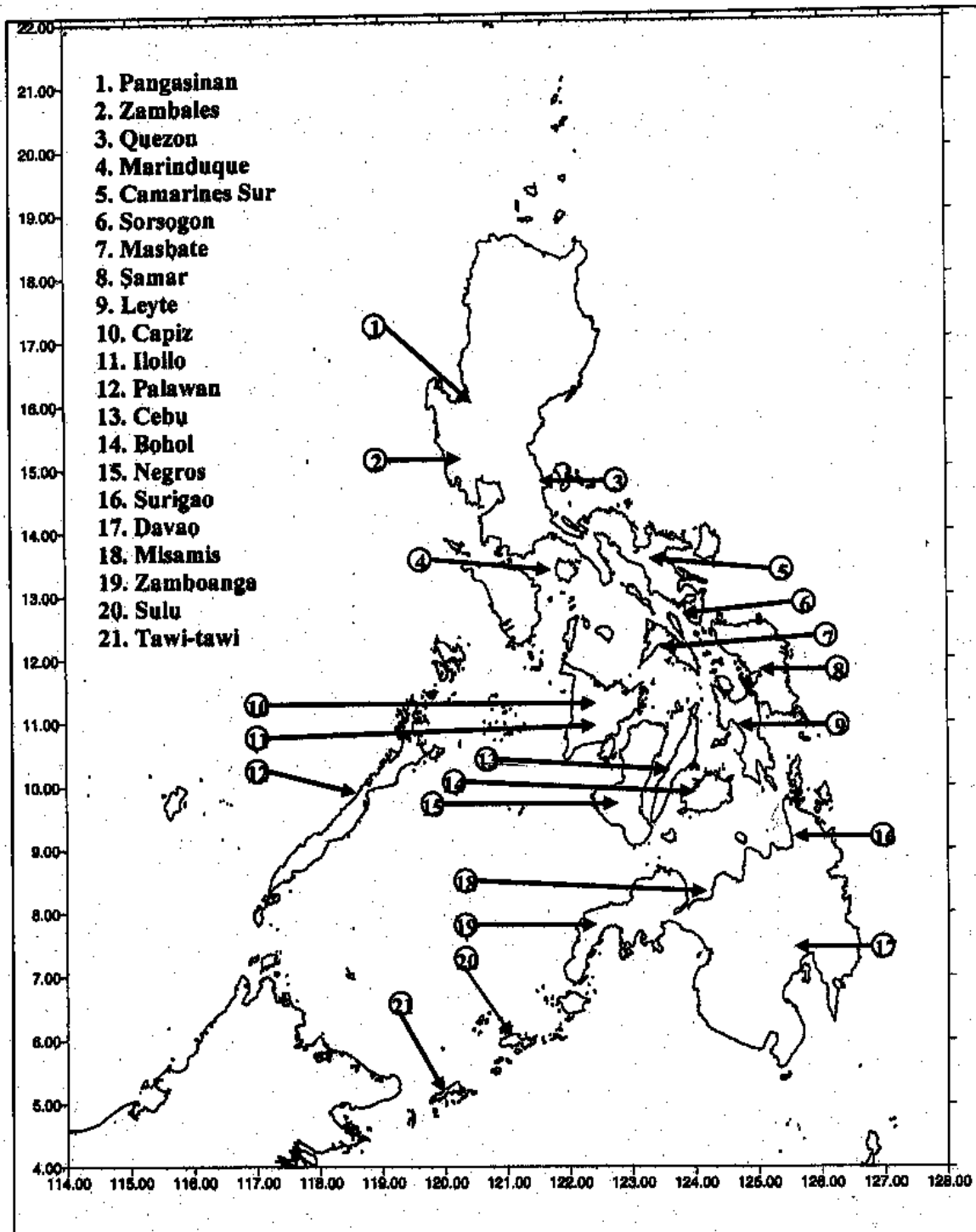
#### b. Areas of distribution

Seahorses are found in waters of Pangasinan, Zamabales, Quezon, Marinduque, Camarines Sur, Sorsogon, Masbate and Palawan in Luzon Island. In the Visayas, they are reported to be present in waters of Iloilo, Capiz, Samar, Leyte, Cebu, Bohol, Negros Oriental and Negros Occidental. While in the Mindanao Island, they occur in the waters of Surigao, Davao, Misamis, Zamboanga, Sulu and Tawi–Tawi (Figure 1). In the waters of some provinces like Batangas, Mindoro and Antique, seahorses are reported to occur but are not collected or traded.

#### c. Abundance (including anecdotal information)

Their abundance is not known since there is no regular collection of catch statistics. Based on information provided by gatherers, seahorses were once abundant but production has been observed to have rapidly declined over more recent years. Moreover, the size of seahorses observed and gathered has also decreased over time.

Figure 1: Map of the Philippines Showing the Occurrence of Seahorses.



#### **d. Monitoring programs**

At present there is no monitoring program in place for seahorses but plans have been initiated to regularly collect seahorse statistics. The problem of identification is a major factor in the monitoring program given that present enumerators who collect catch and effort data for finfishes are not competent to identify seahorse species.

## **II. Nature of Seahorse Fisheries**

#### **a. Commercial, artisanal, subsistence**

The Republic Act 8550 (R.A. 8550) differentiates the catch of commercial and municipal fishers by gear and fishing vessel type. Catch landed by fishing vessels with three gross tons and below are considered municipal or artisanal catch while catch of fishing vessels more than three gross tons are classified as commercial fisheries production or catch. Fishing vessels could be either motorized or non-motorized.

Seahorses are collected mostly by artisanal gatherers/fishers. Commercial catch of seahorses from trawl fisheries are considered to be incidental as they are not target species. The volume is minimal and in most cases the weight and number are not recorded.

#### **b. Estimated number of fishers**

Fishers who are directly dependent on seahorse gathering are estimated to be around 1,500 individuals while those who catch seahorses incidentally number around 2,000. The number of seahorse fishers may vary during seasons of the year, as during the peak seahorse season, the number of gatherers increases and the number of fishers declines during off-season. Again, the actual figure for seahorse fishers is estimated, as there are no actual surveys or records of seahorse fishers in the country.

#### **c. Type of gear used**

Municipal gatherers collect seahorses by handpicking them using lanterns at night in shallow waters. In the daytime, they use scoop nets or push nets. Other fishers use hookah compressors when they collect seahorses in deeper waters. Drag nets, seine nets like trawls and Danish seines also catch seahorses as bycatch or incidental catch.

#### **d. Licensing/Permitting requirements**

The Philippine Fisheries Code of 1998 or R.A. 8550 categorized the fishing sector into two sectors, the commercial and municipal sectors. Licensing of fishers intending to fish within municipal waters is a function of the Bureau of Fisheries and Aquatic Resources (BFAR) devolved to the Local Government Unit (LGU) concern under R.A. 8850. Licenses are issued by the LGU concern where the fishers would operate. However, under the same law, local resident fishers are given priority in acquiring fishing licenses before other fishers from different LGUs are issued fishing licenses.

#### **e. Preferred markets (Live vs. Dried), if any**

Seahorses are marketed in the Philippines either live or dried. Dried seahorses are exported mainly to Hong Kong while live seahorses are exported mainly to North America and Europe for the aquarium industry.

**f. Volumes landed, if known**

The volume of seahorses landed or gathered is not known due to the lack of monitoring in designated landing centers. However, volumes of seahorse exports are known from available records at the One-Stop-Shop of the BFAR.

**g. Conservation programs for seahorses**

Seahorse conservation projects in the Philippines are mandated under R.A. 8550 on which policy on the conservation and management of marine resources is based. Project Seahorse initiated conservation programs for seahorses in close collaboration/coordination with the BFAR/National Fisheries Research and Development Institute (NFRDI).

The Southeast Asian Fisheries Development Center (SEAFDEC) have successfully conducted breeding program of marine ornamental fishes since 1996. Two species of seahorses, *Hippocampus barbouri* and *H. kuda* were included in this program. Seahorses were included in response to calls for global conservation. The study has successfully produced brood stock from hatchery seeds of these two species of seahorses. Their current research in progress includes manipulation of brood stock diets, stock density and feeding of young seahorses.

The SEAFDEC Marine Ornamental Fish Project focuses on:

- 1) Sea ranching and farming in pens of hatchery-reared seahorse juveniles and the transfer of the breeding and farming technologies to coastal fishers and
- 2) Breeding of the hatchery techniques in blue tang production.

**III. Extent of International Trade****a. Number of levels (Buyers, Middlemen, Exporters, etc.)**

The municipal fishing activity in the Philippines passes through levels of middlemen to market their produce. For seahorse trading the fisher/gatherer sells their product either directly to the exporter or through the middleman if the buyer/exporter is not from the locality or far from their place. In the case of most fisheries products the goods pass only to one level or just the middleman or from fishers to middleman then to buyer/exporter.

**b. Information on value, retail and wholesale prices**

The price of dried seahorses varies with size. The average price is P8.00 (8 Philippine Pesos) per piece. The smaller size seahorses are sold at P3.50 per piece while the medium size dried seahorses are sold at P7.00 per piece. The price of large dried seahorses could reach P10.00 per piece.

**c. Customs/CITES involvement at ports**

In the Philippines, CITES management authority personnel are assigned in airports and seaports and are implementing national laws, rules and regulations as well as international agreements in close collaboration and coordination with other agencies involve in national and international shipping like the Customs Personnel, Quarantine Officers, Police Officers, etc.

#### **d. Relationship between CITES offices and Fisheries Agencies**

The BFAR is the CITES Management as well as the Scientific Authority for aquatic resources of the Philippines. However with the enactment of RA 9147 series of 2002 (the Philippine Wildlife Act of 2002) additional agencies and organizations were added to be part of the CITES Scientific Authority. Moreover, the creation of the National Fisheries Research and Development Institute (NFRDI) transferred the function of the Scientific Authority from BFAR to NFRDI. The CITES Scientific Authority of the Philippines therefore has now the following composition namely, the NFRDI, University of the Philippines-Marine Science Institute (UP-MSI), Philippine National Museum (PNM), Siliman University-Marine Laboratory (SU-ML) and the University of the Philippines in the Viasayas-College of Fisheries (UPV-CF).

#### **e. Amount of exports**

Based on the study conducted by Project Seahorse, the 2001-2002 export of dried seahorses was 12.3 tons or 4.2 million individual seahorses while the live trade exported around 1.4 pieces. The 2003 export of dried seahorses to Hong Kong was 500kg valued at \$27,500 based on the record of the BFAR One-Stop-Shop. However, records from Traffic Asia showed that in 2003 Hong Kong imported dried seahorses from the Philippines weighing 4,421kg valued at HK\$2,461,765. Traffic Asia recorded the following volume and value of dried seahorses that Hong Kong imported from the Philippines from 1998 to 2003:

<b>Year</b>	<b>Volume</b>	<b>Value (HK\$ '000)</b>
1998	6502	2317
1999	7189	2853
2000	5874	2716
2001	4512	1844
2002	8607	3762
2003	4421	2462

#### **REFERENCES**

R.A. 8550  
Project Seahorse Foundation for Marine Conservation, Inc.  
Southeast Asian Fisheries Development Center (SEAFDEC)  
Traffic Asia